

Iowa Influenza Webinar for Public Health and Healthcare Professionals: 2019-2020



IOWA DEPARTMENT OF PUBLIC HEALTH (IDPH)
STATE HYGIENIC LABORATORY (SHL)



Webinar Information



- All participants will be muted during the presentation.
 - ▣ Questions can be submitted directly to the facilitator via the Q/A feature located on your control panel
 - ▣ All questions submitted will be answered at the end of the presentation
- This session will be recorded and made available for reviewing
 - ▣ When available, you will receive a follow-up-email on how to access this recording

Presentation Overview



- Influenza Activity 2018-19 Summary
- Iowa Influenza Surveillance Network (IISN)
- Vaccine Update
- Laboratory
 - ▣ Specimen collection
 - ▣ Specimen submission and reporting results
- Antiviral Treatment and Prophylaxis

Presenters



In order of presentation:

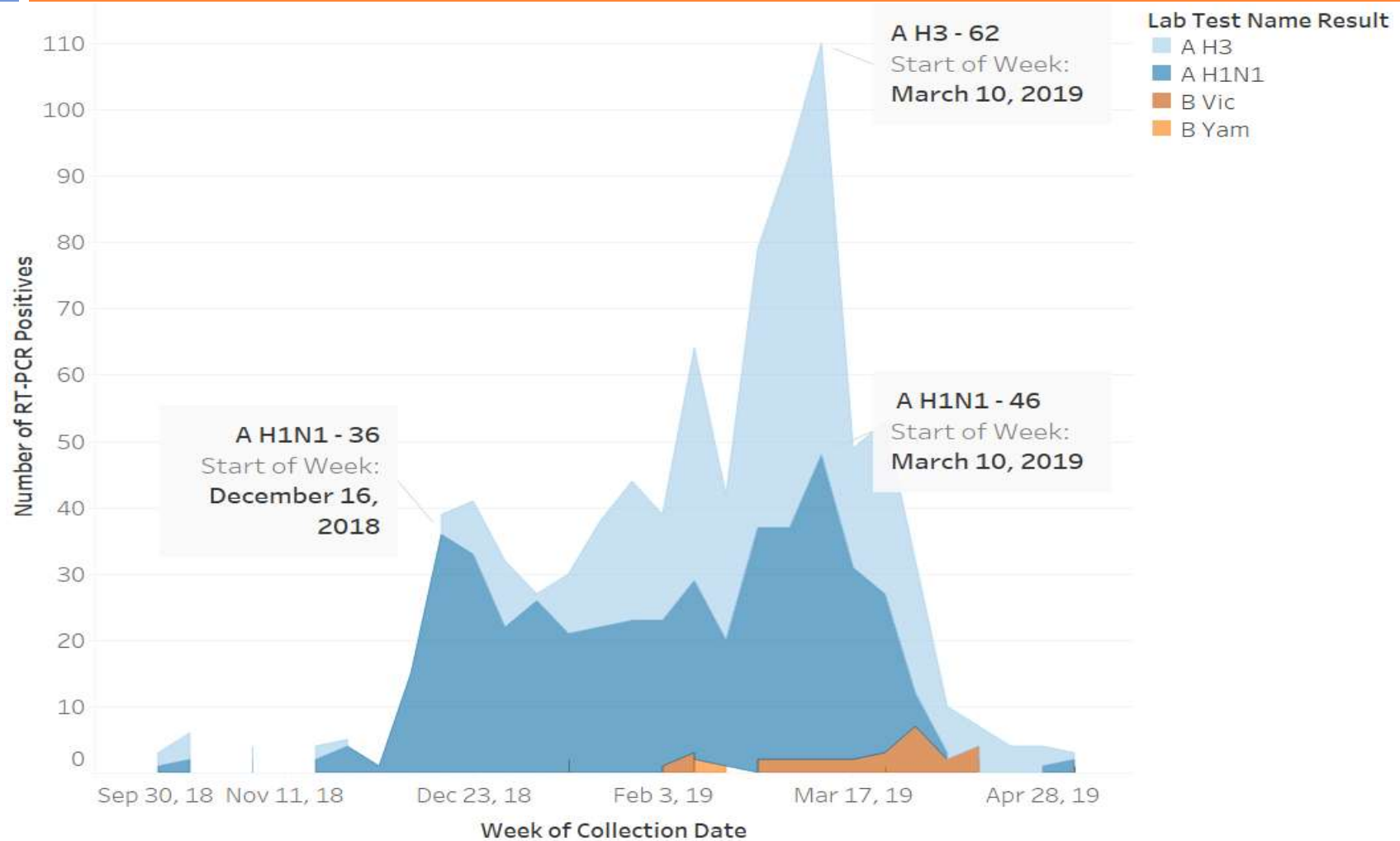
- Andy Weigel, LMSW, Influenza Surveillance Coordinator, IDPH
- Shelly Jensen, RN, BSN, Immunization Nurse Consultant, IDPH
- Jeff Benfer, MS, MB (ASCP)cm, Supervisor of Virology and Molecular Biology, SHL
- Caitlin Pedati, MD, MPH, FAAP Medical Director / State Epidemiologist, IDPH



Influenza Surveillance 2018-19

Influenza Subtype by Week:

September 30, 2018 – May 18, 2019



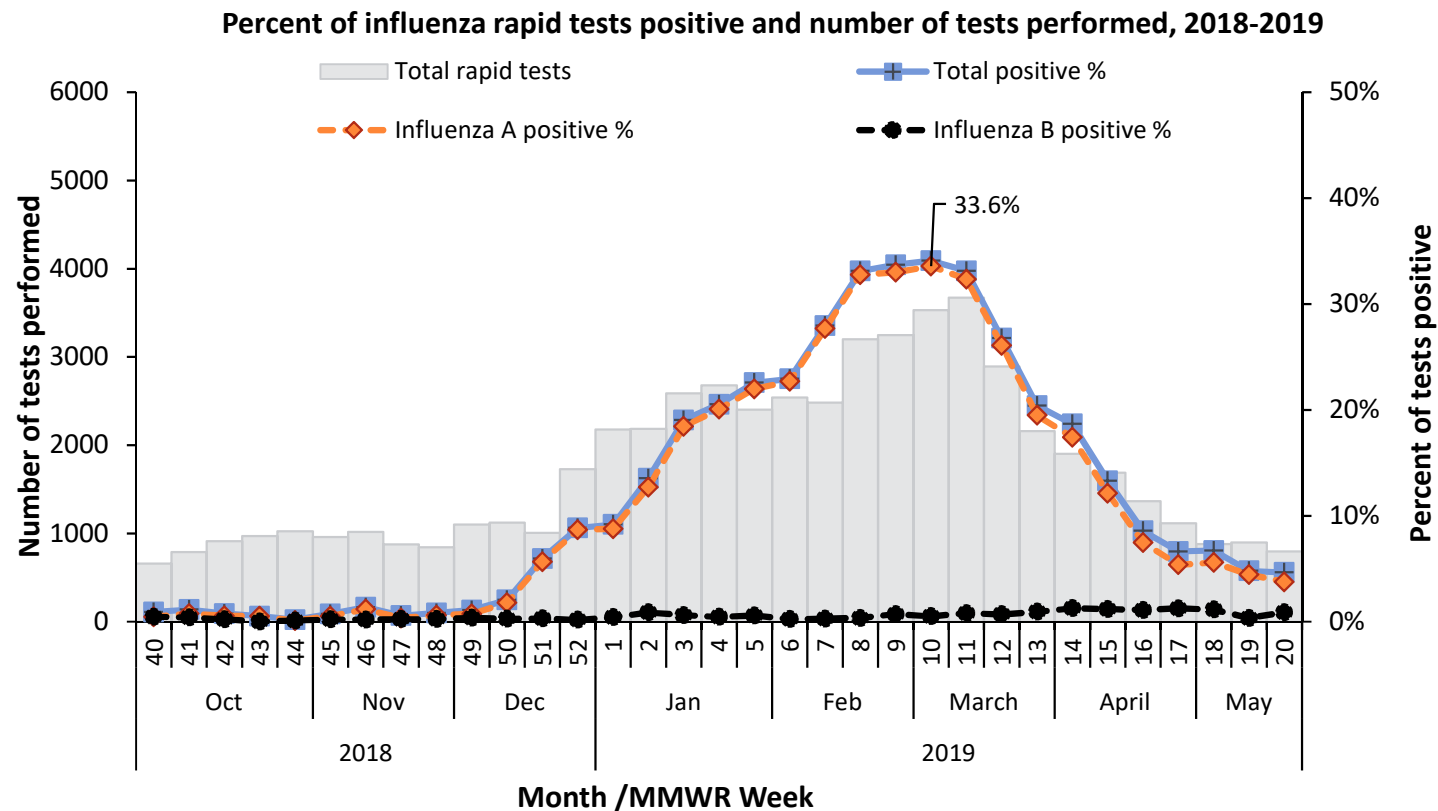
How Does this Season Compare?

Season	Main Subtype*	ILI > 1.6%	Total Hospital	Deaths	LTCF Outbreaks
14-15	A(H3)	7	1191	195	62
15-16	A(H1N1)	1	352	44	7
16-17	A(H3)	6	1078	135	56
17-18	A(H3)	11	1889	259	90
18-19	A(H1N1)	11	876	87	53
	A H3				

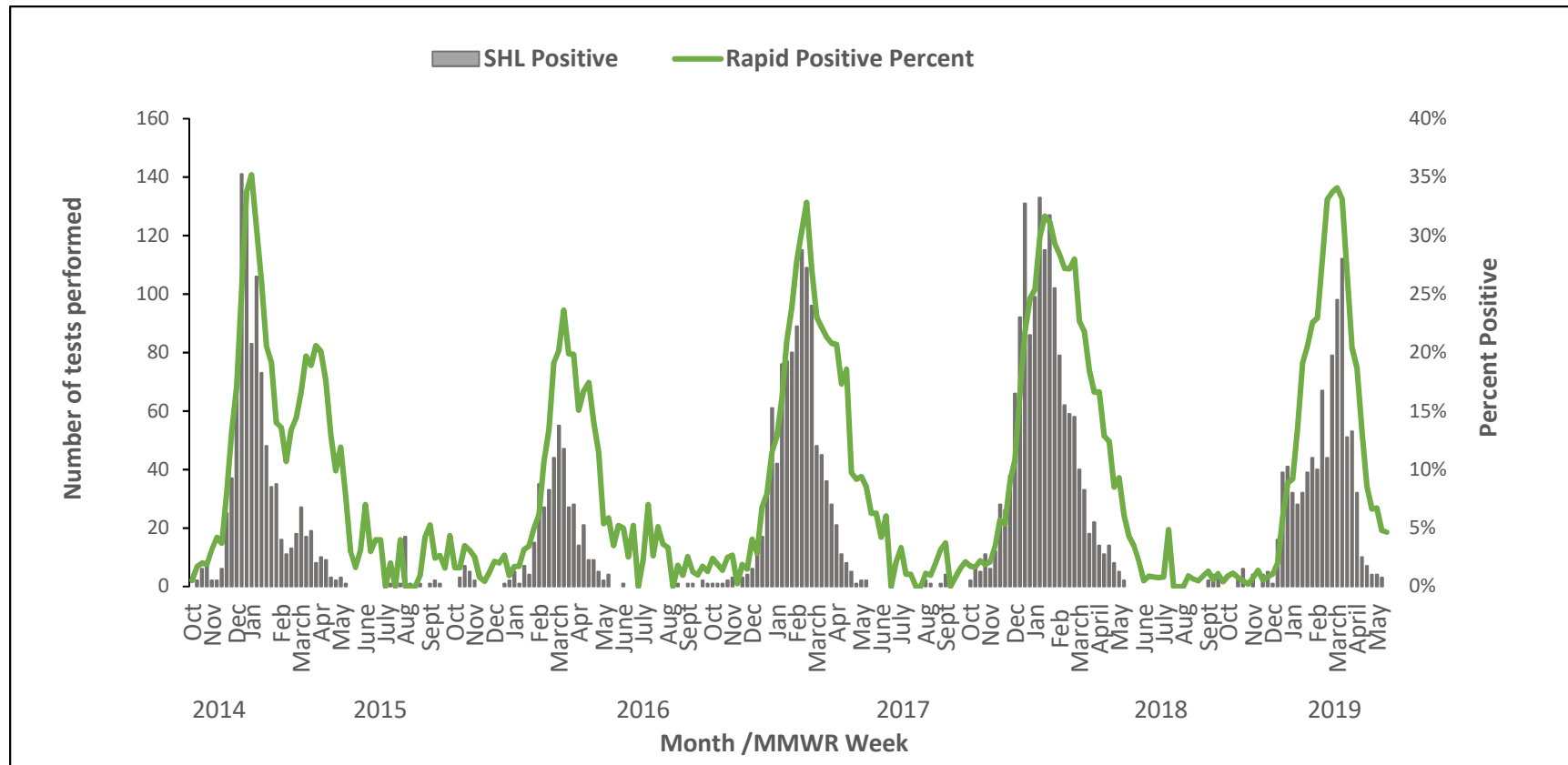
Notes: Subtypes are influenza A(H3) and A(H1N1)pdm09;
Total are for MMWR weeks 40 -20 for each season, except
2014-15 is weeks 41-21 due to 53 weeks in season.

Influenza Testing – Clinical Labs

September 30, 2018 – May 18, 2019

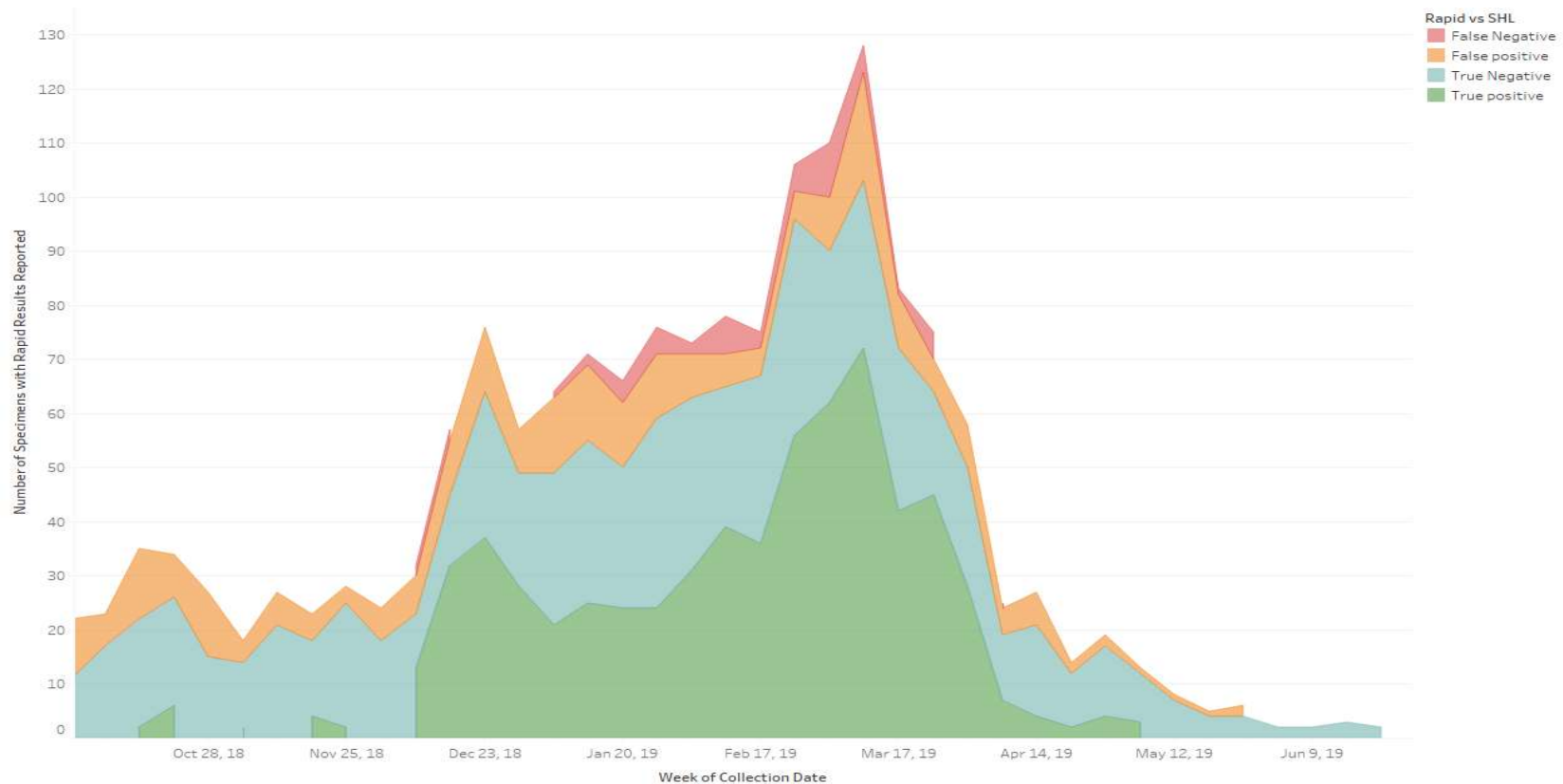


Positives at SHL vs Clinical Labs



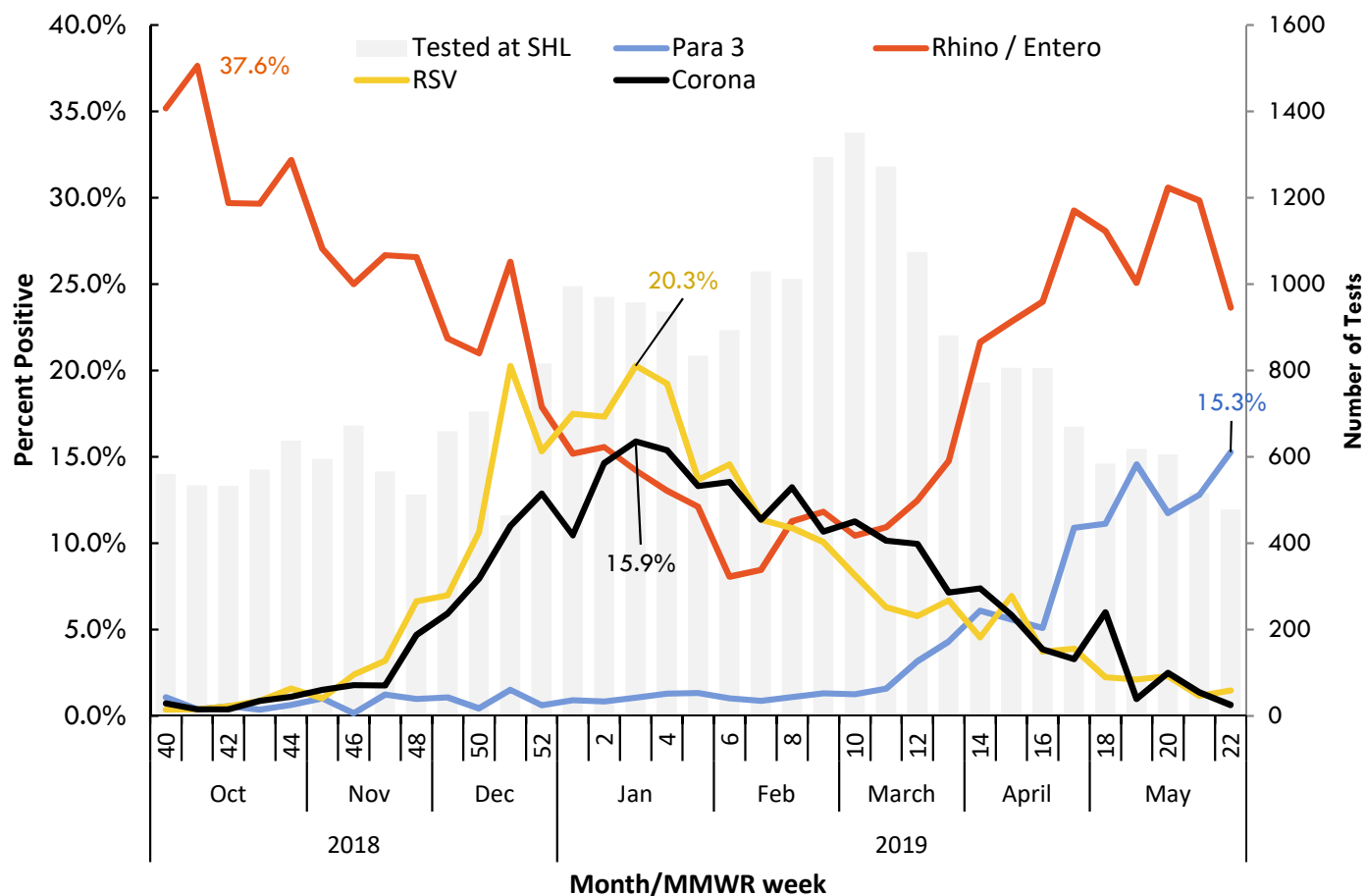
Rapid Testing vs. SHL Results by Time

September 30, 2018 – June 29, 2019



Note: 321 specimens with no rapid result reported and four specimens with indeterminate rapid and/or SHL results

Non-influenza Respiratory Virus by Week: September 30, 2018 – May 18, 2019

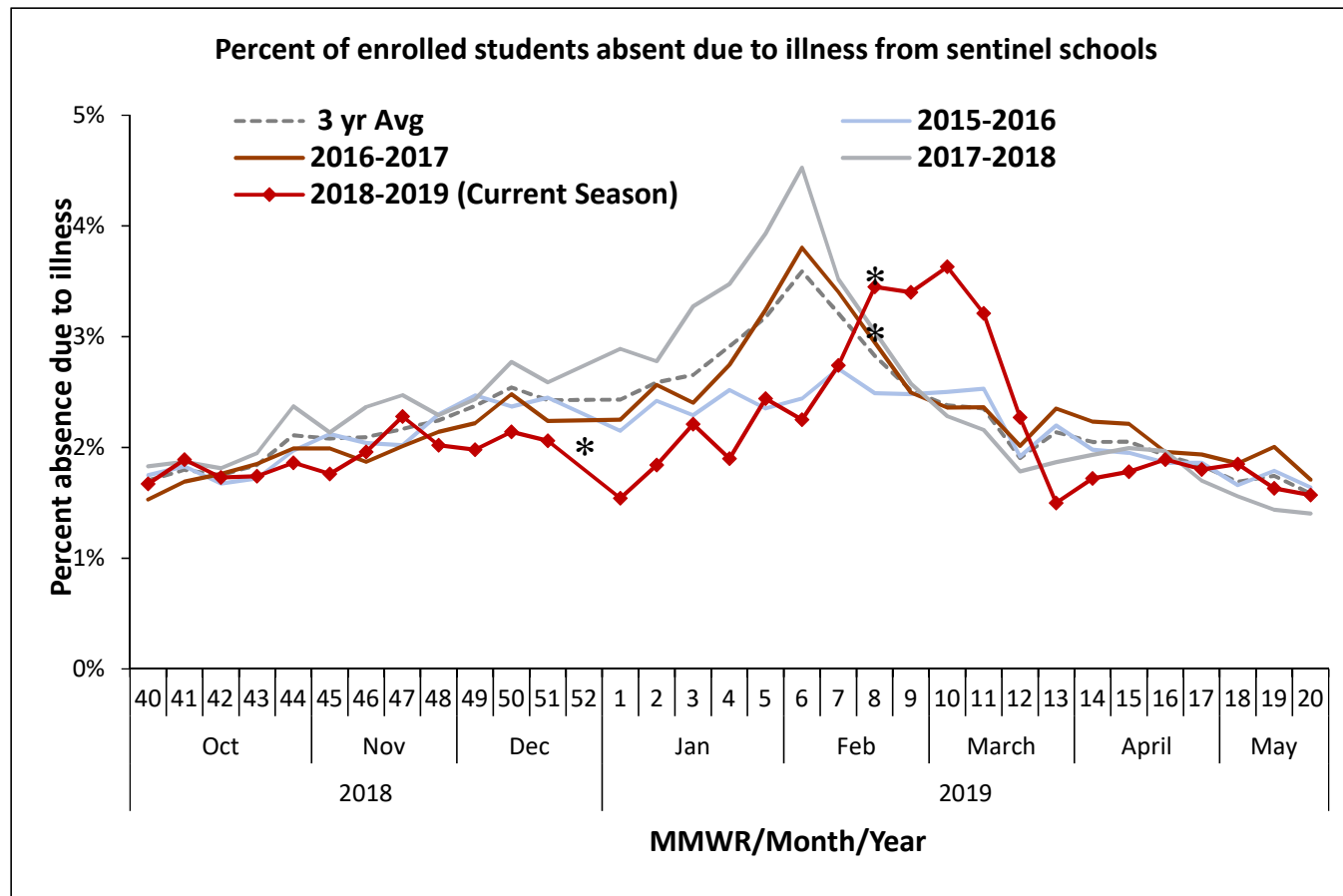


Hospitalization Status and Influenza Subtype 2018-2019*

Subtype	Number with hospitalization status	Percent Hospitalized
A (H1N1)pdm09	365	46%
A(H3)	316	41%
B(Victoria or Yamagata lineage)	28	0%

* Specimens sent to SHL and collected from Iowa residents between September 30, 2018 and June 29, 2019.

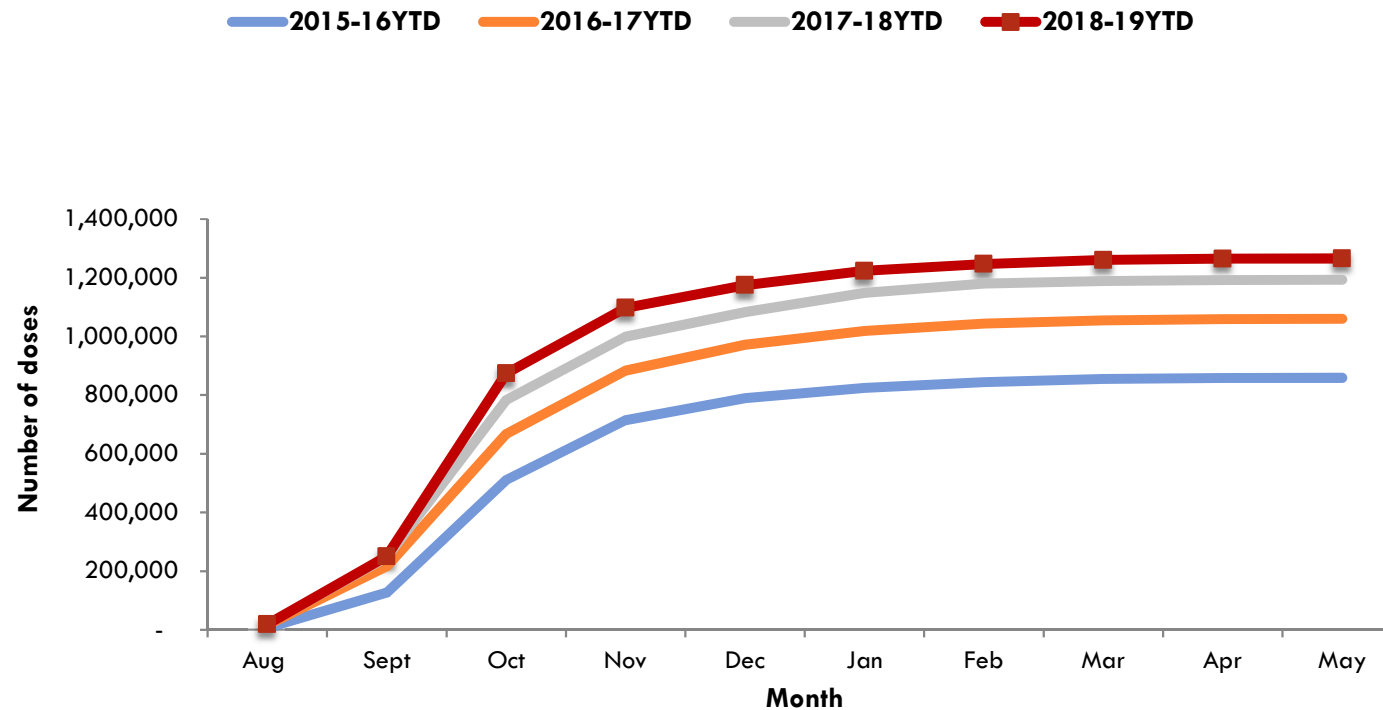
School Illness Reported by Year



*School absences data not reported for week 52 due to holiday break

**School data may not accurately reflect influenza illness for week 12 when many schools closed for spring break

Cumulative Administered Doses of Seasonal Influenza Vaccine Reported to IRIS, Year to Date by Season





Iowa Influenza Surveillance Network

IISN Program Components



- Outpatient illness-like illness (ILINet)
- Influenza-associated hospitalizations
- Public health and clinical laboratories
- Long-term care facility outbreaks
- Influenza-related mortality
- School absences due to illness

Reporting Influenza Outbreaks



- Long-term care facilities
 - ▣ Contact local public health, your regional epidemiologist, or IDPH at 800-362-2736
- Schools with at least 10 percent illness
 - ▣ All Iowa schools are required to report to IDPH when percent of illness meets or exceeds 10 percent
 - ▣ Report using IDPH website idph.iowa.gov/influenza/schools or contact CADE at 800-362-2736

Outbreak Management Guidance for Long-term Care Facilities

- ❑ Changes to CDC guidance in 2019 based on 2018 IDSA influenza clinical practice guidelines update
- ❑ Antiviral prophylaxis still recommended from some residents but varies based on units affected
- ❑ Implement standard and droplet precautions
- ❑ Cohort and/or isolate ill residents as appropriate
- ❑ Restrict ill personnel from patient care
- ❑ Limit visitation and new admissions

<https://www.cdc.gov/flu/professionals/infectioncontrol/ltc-facility-guidance.htm>
<https://doi.org/10.1093/cid/ciy866>

Outbreak Control for Schools and Child Care Centers



- Work with local public health agencies to investigate and collect specimens as needed
- Utilize resources at IDPH and CDC
- Reinforce illness policies
- Increase cleaning and disinfecting of key areas
- Encourage and teach hand hygiene
- Notify and educate parents

IISN Weekly Report



Iowa Influenza Surveillance Network (IISN) Influenza-like Illness (ILI) and Other Respiratory Viruses Weekly Activity Report For the week ending May 19, 2018 - Week 20

All data presented in this report are provisional and may change as additional reports are received



Iowa Influenza Geographic Spread

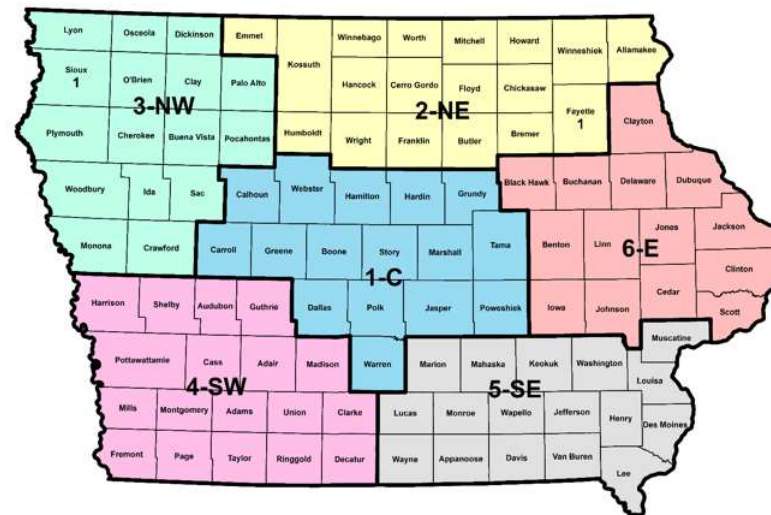
No Activity	Sporadic	Local	Regional	Widespread
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Note: See CDC activity estimates for definition www.cdc.gov/flu/weekly/overview.htm

Quick Stats

Percent of influenza rapid test positive	4% (17/396)
Percent of RSV rapid tests positive	5% (2/43)
Influenza-associated hospitalizations	2/2754 inpatients
Percent of outpatient visits for ILI	0.36% (baseline 1.9%)
Percent school absence due to illness	1.40%
Number of long-term care influenza outbreaks	0
Number of schools with $\geq 10\%$ absence due to illness	2
Influenza-associated mortality -all ages (Cumulative)	270
Influenza-associated pediatric mortality (Cumulative)	0

Number of schools with at least 10 percent of students absent, by county and region



idph.iowa.gov/influenza/reports

Contact Information



To learn more about our influenza surveillance Programs, to become a participant, or to sign up for the surveillance report email list, please contact

Andy Weigel, LMSW

Iowa Influenza Surveillance Network Coordinator

Iowa Department of Public Health

Phone: 515-322-1937

andy.weigel@idph.iowa.gov

Influenza Vaccination 2019-2020

The Best Shot At Prevention



Influenza is the most frequent cause of death from a vaccine-preventable disease in the U.S.

The best way to **prevent** the flu is with annual vaccination.

Recommended for **everyone** 6 months of age and older, unless a medical contraindication.

Vaccine Composition



□ **Quadrivalent:**

- A/Brisbane/02/2018 (H1N1)pdm09-like virus (updated)
- A/Kansas/14/2017 (H3N2)-like virus (updated)
- B/Colorado/06/2017-like (Victoria lineage) virus
- B/Phuket/3073/2013-like (Yamagata lineage) virus

□ **Trivalent:**

- A/Brisbane/02/2018 (H1N1)pdm09-like virus (updated)
- A/Kansas/14/2017 (H3N2)-like virus (updated)
- B/Colorado/06/2017-like (Victoria lineage) virus

Predicted Vaccine Effectiveness



- Variable depending upon
 - ▣ age and health status of vaccine recipient
 - ▣ the match between circulating virus strains and strains included in the vaccine

the **benefits** of flu vaccination 2017-2018

The estimated number of flu **illnesses prevented by vaccination** during the 2017-2018 season:

7million

About the population of
New York City



The estimated number of flu **hospitalizations prevented by vaccination** during the 2017-2018 season:

109,000

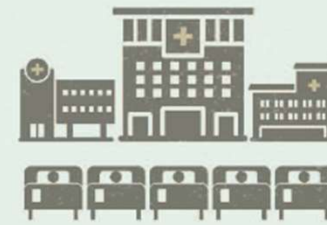
About the number of vehicles
crossing the Golden Gate Bridge
each day



The estimated number of flu **deaths prevented by vaccination** during the 2017-2018 season:

8,000

Twice the number of hospitals in
the United States



DATA: Journal Clinical Infectious Disease, Effects of Influenza Vaccination in the United States during the 2017-2018 Influenza Season, <https://doi.org/10.1093/cid/ciz075>



get vaccinated
www.cdc.gov/flu

ACIP Recommendation



Routine annual influenza vaccination for all persons aged ≥ 6 months who do not have contraindications.

No preferential recommendation is made for one influenza vaccine product over another for persons for whom more than one licensed, recommended, and appropriate product is available.

Timing



Optimally, vaccination should occur prior to flu circulating in the community; ideally by the end of October

BUT- getting vaccinated later is still beneficial (throughout the entire flu season)

It is never too late to vaccinate!

Children 6 months-8 years



- If a child received at least 2 doses of influenza vaccine before July 1, 2019, only 1 dose is needed for 2019-2020. Doses do not need to be in the same flu season or consecutive seasons.
- If a child is receiving influenza vaccine for the first time or if they have not received at least 2 doses before July 1, 2019, 2 doses are needed for optimal protection.
- Separate doses by at least 4 weeks.

For children aged 8 years who require 2 doses of vaccine, both doses should be administered even if the child turns 9 years between receipt of dose 1 and dose 2.

Persons With Egg Allergy



- Hives only: administer any age appropriate flu vaccine
- Symptoms other than hives: administer any age appropriate flu vaccine in an inpatient or outpatient medical setting. A health care provider who is able to recognize and manage severe allergic conditions should supervise.

A previous severe allergic reaction to flu vaccine, regardless of the component suspected of being responsible for the reaction, is a contraindication to future receipt of the vaccine.

Available Products

Influenza Vaccine Information, by Age Group - United States, 2019-20 Influenza Season

Trade Name	Manufacturer	Presentation	Mercury/Ovalbumin Content (µg per 0.5 mL dose)	Age Group	Route
Inactivated influenza vaccines, quadrivalent (IIV4s), standard-dose-egg based					
Afluria Quadrivalent	Seqirus	0.25 mL prefilled syringe+	0.0	6-35 months	IM [§]
		0.5 mL prefilled syringe+	0.0	≥ 3 years	IM [§]
		5.0 mL multi-dose vial+	24.5	≥ 6 months via needle/syringe; 18 - 64 years via jet injector	IM [§]
Fluarix Quadrivalent	GlaxoSmithKline	0.5 mL prefilled syringe	0.00	≥ 6 months	IM [§]
FluLaval Quadrivalent	GlaxoSmithKline	0.5 mL prefilled syringe	0.00	≥ 6 months	IM [§]
		5.0 mL multi-dose vial	<25.0		
Fluzone Quadrivalent	Sanofi Pasteur	0.25 mL prefilled syringe**	0.0	6-35 months	IM [§]
		0.5 mL prefilled syringe**	0.0	≥ 6 months	
		0.5 mL single dose vial**	0.0	≥ 6 months	
		5.0 mL multi-dose vial**	25	≥ 6 months	
Inactivated influenza vaccine, quadrivalent (ccIIV4), standard-dose- cell culture-based					
Flucelvax Quadrivalent	Seqirus	0.5 mL prefilled syringe	0.0	≥ 4 years	IM [§]
		5.0 mL multi-dose vial	25.0		
Adjuvanted inactivated influenza vaccine, trivalent (aIIV3)-standard-dose-egg based					
Fluad	Seqirus	0.5 mL prefilled syringe	0.0	≥ 65 years	IM [§]
Inactivated influenza vaccine, trivalent (IIV3), high-dose-egg based					
Fluzone High-Dose	Sanofi Pasteur	0.5 mL single dose prefilled syringe	0.0	≥ 65 years	IM [§]
Recombinant influenza vaccine, quadrivalent (RIV4)					
Flublok Quadrivalent	Sanofi Pasteur	0.5 mL prefilled syringe	0.0	≥ 18 years	IM [§]
Live, attenuated influenza vaccine, quadrivalent (LAIV4)- egg based					
FluMist Quadrivalent	AstraZeneca	0.2mL prefilled single-use intranasal sprayer	0.0	2- 49 years	NAS

Tips and Reminders



- ❑ Flu vaccines should be refrigerated between 2°C to 8°C (36°F to 46°F). Do not freeze. Protect from light.
- ❑ When using multi-dose vials, only withdraw the number of doses indicated in the manufacturer's package insert.
- ❑ Single dose vials should not be accessed for more than 1 dose.
- ❑ Prefilling syringes is discouraged. Consider using manufacturer-supplied prefilled syringes.
- ❑ Vaccines in multi-dose vials that do not require reconstitution may be used through the expiration date printed on the label as long as the vaccine is not contaminated **unless otherwise indicated by the manufacturer.**

Tips and Reminders

- Live vaccines, including LAIV, must be administered on the same day or separated by at least 4 weeks.
- Administer the appropriate vaccine and dosage based on the patient's current age at the time of the visit.
- Dose volume is distinct from number of doses needed
- Observe all patients for at least 15 minutes following vaccination.
- 4 injectable flu vaccine presentations available for 6-35 months of age. Note dosages.
 - ▣ Afluria 0.25mL
 - ▣ Fluzone 0.25mL OR 0.5mL
 - ▣ Fluarix 0.5mL
 - ▣ Flulaval 0.5mL

Flu Resources

- **CDC:** <https://www.cdc.gov/flu/index.htm>
- **Morbidity and Mortality Weekly Report (MMWR):** https://www.cdc.gov/mmwr/volumes/68/rr/pdfs/rr6803-h.pdf?deliveryName=USCDC_921-DM7382
- **Immunization Action Coalition (IAC):** <http://www.immunize.org/>
- **IDPH:** <https://idph.iowa.gov/immtb/immunization/vaccine>
- **Vaccine Information Statements (VIS):**
<http://www.immunize.org/vis/>
<https://www.cdc.gov/vaccines/hcp/vis/vis-statements/flu.html>
<https://www.cdc.gov/vaccines/hcp/vis/vis-statements/flulive.html>

We are Here to Support You



Iowa Department of Public Health Immunization Program

<https://idph.iowa.gov/immtb/immunization>

1-800-831-6293

Thank You



Shelly Jensen RN BSN

Immunization Nurse Consultant

1-800-831-6293 ext. 2

Shelly.Jensen@idph.iowa.gov

Specimen Collection, Submission & Reporting Results



Why Submit?



- To monitor when and where influenza is circulating in the community
 - ▣ Provides state and national surveillance data
 - ▣ Surveillance information is published weekly by IDPH
- Point of care (rapid) test challenges
 - ▣ False positive during low prevalence
 - ▣ False negative (less sensitive than molecular methods)
 - ▣ SHL uses the CDC molecular test (PCR) that is more sensitive and specific
 - ▣ SHL tests provide additional subtype results

Why Submit?

- Provides virus strains for further characterization
 - ▣ Vaccine match
 - ▣ Vaccine composition
 - ▣ Identification of novel strains
 - ▣ Monitor for resistance to influenza drugs
- Estimate Burden of Disease
 - ▣ Influenza-attributable proportion of influenza-like illness
 - How much respiratory illness is caused by flu versus other respiratory pathogens
 - ▣ Level of care associated with influenza positive specimens
 - Please check the box on your TRF for inpatient or outpatient
 - ▣ Population based rates of influenza

State Hygienic Laboratory and Iowa Department of Public Health

Influenza Surveillance Testing Guidance 2019/2020

Patients must have **influenza-like illness** (*fever and respiratory symptoms without other apparent cause*).
Contact IDPH or SHL for guidance in the event of an ILI outbreak.

When to submit specimens to SHL:

- **Outpatient facilities-** Submit up to 2 specimens per week to contribute to surveillance **regardless of in-house test method**
- **Inpatient-** hospitalized patients with suspected Influenza and without other apparent cause **regardless of in-house method or tests results**

What specimens to submit to SHL:

- Combined nasal swab and throat swab into one tube **OR** Nasopharyngeal swab
- Do not submit swabs or specimens that have been used for rapid testing
- Must be in viral transport medium (OK to use any type of viral transport media, but not bacterial transport media)

SHL will run PCR for Influenza A and B and if positive will: Determine A subtype (H3 or 2009 H1N1 pdm) or Determine B lineage (Victoria or Yamagata)

SHL confirmatory influenza testing serves the following purposes:

- Demonstrates predictive value of rapid tests
- Situational awareness- when and where flu is circulating
- Novel virus detection
- Contribute samples to CDC and WHO- antiviral resistance, vaccine strain selection and match to current vaccine
- Surveillance testing is provided at no cost and is partially supported by the Centers for Disease Control and Prevention

Thank you for your support of this program!

The Optimal Specimen Collection



- Three days post symptom onset (range 1 to 7 days)
- Specimen types
 - ▣ Nasal swab and throat swab combined into one tube
 - ▣ Nasopharyngeal flocked swab
 - ▣ Do not submit swabs or specimens that have been used for rapid testing
- Must be in viral transport medium

Specimen Collection



Order Virus Isolation and Detection Specimen Collection Kits

- ▣ Call SHL at 319-335-4500
- ▣ Order on-line

www.shl.uiowa.edu

Specimen Collection

State Hygienic Laboratory at The University of Iowa

Home Contact CALS IT

Google Custom Search

About the SHL Education/Training Lab Certification Publications News

Test Results
Clinical Test Request Forms
Order A Test

Environmental

- Test Menu
- Air Quality
- Analytical Chemistry
- Grants to Counties
- Well Water
- Surface Water

Newborn & Maternal Screening

- Abnormalities
- Disorders
- Maternal Screening
- Newborn Screening

Disease Control

- Test Menu
- Test Request Forms
- Microbiology
- Influenza
- Molecular Diagnostics
- Serology

Research

- Journal Articles
- Presentations
- Posters
- Services

Events

- 2018 Laboratory Symposium Sept. 27, 2018
- Iowa Water Conference proposals Due Sept. 30

What's Popular?

- Order a Water Sampling Kit
- Order Clinical Test Kit
- Order Newborn Screening Supplies
- FAQ: Private Well Water
- Results: OpenELIS Login
- Clinical Test Request Form Generator
- Pay Invoice Online

Tech Updates

- Sending PCR positive Cyclospora samples to SHL

News

Officials issue advisory for Sorghum
The Iowa Department of Public Health (IDPH), the Johnson County Public Health Department, and the Iowa Department of Inspections and Appeals (DIA) on Sept. 4 issued a consumer advisory for sorghum made by Pure Missouri Ozark Country Sorghum in Dunnegan, Mo.

Inspired work removes tons of trash from river
Iowa Project AWARE is not for the faint of heart. It's usually hot. Folks get muddy. Lifting parts of appliances, tires and other trash weighed down by water and mud tests muscles and patience.

Teachers association honors Project AWARE
The Iowa Science Teachers Section (ISTS) of the Iowa Academy of Science announced on Aug. 8 that it selected Project AWARE (A Watershed Awareness River Expedition) as a recipient of its prestigious Friend of Science Award.

West Nile virus cases nearly double in peak season
The number of West Nile virus cases in Iowa has nearly doubled from nine as of Aug. 21 to 17 on Aug. 27. One of those cases resulted in the death of an

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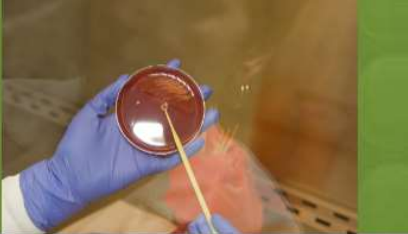
State Hygienic Laboratory
about 3 weeks ago

Hats off to our University of Iowa student athletes - current and past - and to those who welcome them aboard the SHL team.

Ordering Collection Kits

at The University of Iowa

KITS / QUOTES / FORMS



[About the SHL](#)

[Environmental](#)

[Newborn and Maternal Screening](#)

[Disease Control](#)

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[News](#)

[Center for the Advancement of Laboratory Science](#)

Order Clinical Kits

Required fields are indicated by an *

Contact Information

*Name:

*Facility:

Department:

*Telephone:

Email:

Shipping Information

*Street / P.O. Box:

*City:

*State:

*Zip:


Kit Information

*Type of kit:

*Qty. of Kits:


Comments

Test Request Form




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[About the SHL](#) [Education/Training](#) [Lab Certification](#) [Publications](#) [News](#)



Hygienic Lab staff served as official observers for a drill at Cedar Rapids US Postal Services Center.



Test Results

NEW Clinical Test Request Forms

A-Z Test Menu

Environmental

- Outdoor Air Quality
- Analytical Services
- Grants to Counties
- Private Well Water
- Surface Water

Newborn & Maternal Screening

- Abnormalities
- Disorders
- Maternal Screening
- Newborn Screening

Disease Control

- General Microbiology
- Influenza
- Molecular Diagnostics
- Sentinel Lab Training
- Serology

Center for the Advancement of Laboratory Science

- Explore
- Learn
- Engage
- Partners


Registrations

- 2015 Laboratory Symposium
Tuesday, Sept. 29

What's Popular?


- Hourly Air Quality Index Maps
- Order a Water Sampling Kit
- FAQ: Private Well Water
- Results: OpenEliis Login
- Clinical Test Request Form Generator

Photo Tour




News

Arsenic testing available for private well owners



Private well owners in Iowa now may have their drinking water tested for arsenic at no cost through the Grants to Counties Program. On July 1, arsenic was added as an optional analysis to the minimum analyses for nitrate (including nitrite) and total coliform bacteria.

Laboratory Symposium set for Sept. 29



The 48th annual Laboratory Symposium will be held on Tuesday, Sept. 29 at the Hygienic Laboratory in Ankeny, located on the Des Moines Area Community College campus.

Influenza outbreak identified in long-term care facility



Iowa Department of Public Health announced on Aug. 7 that it had joined a county health department to investigate an outbreak of influenza A (H3) in a


Connect

State Hygienic La...

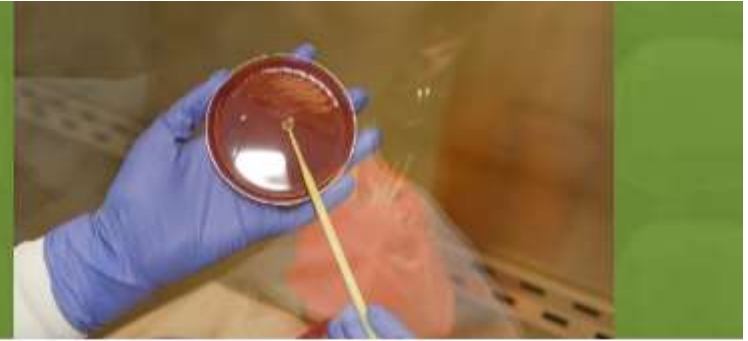
Like Page 280 likes

State Hygienic Laboratory

added 5 new photos.
August 7



TEST MENU



About the SHL

Environmental

Newborn and Maternal Screening

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Lab Certification Programs

Publications

News

Clinical Test Menu



Clinical
Test
Menu



Env
Test
Menu



Env
Analyte
Menu

Step 1. Select the test request form:

- ☐ Bacteriology
- ☐ Blood Lead
- ☐ Chlamydia trachomatis/Neisseria gonorrhoeae
- ☐ Cystic Fibrosis
- ☐ Serology/Immunology
- ☐ Viral and Bacterial PCR and DFA

Step 2. Select your organization (listing is sorted by name):

If your organization is not listed or your address is incorrect, please contact the laboratory.

- ☐ 7812 - ACKLEY MEDICAL CENTER, 1000 10TH AVE, ACKLEY, IA
- ☐ 2062 - ADAIR COUNTY HOME CARE, 117 NW HAYES, GREENFIELD, IA
- ☐ 7813 - ADAIR COUNTY MEMORIAL HOSPITAL, 609 SE KENT ST, GREENFIELD, IA
- ☐ 7814 - ADAIR COUNTY VETERINARY CLINIC, 407 SE NOBLE, GREENFIELD, IA
- ☐ 7815 - ADAMS PET HOSPITAL, 5875 SARATOGA RD, DUBUQUE, IA
- ☐ 7816 - ADVANCED PET CARE CLINIC, 4507 ALGONQUIN DR STE A, CEDAR FALLS, IA
- ☐ 7817 - AKRON MERCY MEDICAL CLINIC, 321 MILLS ST, PO BOX 200, AKRON, IA
- ☐ 7819 - ALEGENT CREIGHTON HEALTH CLINIC, 210 S MAIN, LENOX, IA
- ☐ 7820 - ALEGENT CREIGHTON HEALTH CLINIC, 1502 MADISON AVE, BEDFORD, IA
- ☐ 7821 - ALEGENT CREIGHTON HEALTH CLINIC, 601 ROSERY DR, PO BOX 188, CORNING, IA
- ☐ 7822 - ALEGENT HEALTH, 1751 MADISON AVE, COUNCIL BLUFFS, IA

FACILITIES, PLACE YOUR PATIENT
INFORMATION LABEL HERE
OR
COMPLETELY FILL OUT
INFORMATION BELOW



State Hygienic Laboratory

U of I Research Park
2460 Crosspark Road
Coralville, IA 52241-4721
Phone # 319-335-4500 or
800-421-IOWA

Ankeny Laboratory
2220 S. Ankeny Blvd.
Ankeny, IA 50023-9093
Phone # 515-725-1600

Lakeside Laboratory
1535 Highway 85
Milford, IA 51551-7287
Phone # 712-337-3669

<http://www.shl.uiowa.edu>

Viral and Bacterial PCR and DFA Test Request Form

PATIENT INFORMATION						
Sample must have two patient identifiers that match this form.						
Patient ID/MRN/Chart ID	Last Name	First Name	Birth Date			
SSN	Address	City	State	Zip Code	Area Code/Phone #	
Gender <input type="checkbox"/> Female <input type="checkbox"/> Male <input type="checkbox"/> Unknown	Race <input type="checkbox"/> White <input type="checkbox"/> Black <input type="checkbox"/> Asian <input type="checkbox"/> American Indian/Alaskan Native <input type="checkbox"/> Native Hawaiian/Pacific Islander <input type="checkbox"/> Unknown					
Ethnicity <input type="checkbox"/> Hispanic <input type="checkbox"/> Non-Hispanic <input type="checkbox"/> Unknown Public Insurance: <input type="checkbox"/> Medicaid <input type="checkbox"/> Medicare <input type="checkbox"/> Amerigroup MCO <input type="checkbox"/> UnitedHealthcare MCO Insurance ID# _____ Diagnosis Code _____						
ORDERING HEALTH CARE PROVIDER INFORMATION						
Last Name	First Name	NPI (or Facility's Provider ID)	Area Code/Phone #			
ORGANIZATION INFORMATION (Results are reported to this address. Organizations are responsible for submitting claims to private insurance.)						
Organization id 7812	Organization Name ACKLEY MEDICAL CENTER	Address 1 1000 10TH AVE				
Address 2	City ACKLEY	State IA	Zip Code 50601			

SAMPLE INFORMATION (Check appropriate sample type and complete requested information)			
Date Collected / /	Time Collected (24 hr. clock) :	Clinical Diagnosis	
Sample Type	<input type="checkbox"/> BAL	<input type="checkbox"/> Buccal swab (Oral swab)	<input type="checkbox"/>
<input type="checkbox"/> CSF	<input type="checkbox"/> Lesion swab	<input type="checkbox"/> Nasal swab	<input type="checkbox"/>
<input type="checkbox"/> NP wash/aspirate	<input type="checkbox"/> Ocular swab	<input type="checkbox"/> Rectal swab	<input type="checkbox"/>
<input type="checkbox"/> Tear strip	<input type="checkbox"/> Throat swab	<input type="checkbox"/> Tracheal aspirate	<input type="checkbox"/>
<input type="checkbox"/> Vaginal swab	<input type="checkbox"/> Other: _____		
TEST(S) REQUESTED			
<input type="checkbox"/> Influenza by PCR (A, B, and subtyping for A and B)		Hospitalized (inpatient)	
Rapid Test Result: <input type="checkbox"/> Positive <input type="checkbox"/> Negative <input type="checkbox"/> Not Performed		<input type="checkbox"/> Yes <input type="checkbox"/> No	
PCR/NAAT			
<input type="checkbox"/> <i>Bordetella pertussis</i>	<input type="checkbox"/> Herpes Simplex Virus (Not Typed)		
<input type="checkbox"/> <i>Chlamydia pneumoniae</i>	(CSF or Ocular Swab)		
<input type="checkbox"/> Enterovirus (CSF)	<input type="checkbox"/> Herpes Simplex Virus Types 1, 2 and		
<input type="checkbox"/> <i>Legionella pneumophila</i>	Varicella Zoster Virus (VZV) (Lesion Swab)		
<input type="checkbox"/> Mumps (Buccal swab)	<input type="checkbox"/> <i>Chlamydia trachomatis</i> / <i>Neisseria gonorrhoeae</i>		
<input type="checkbox"/> <i>Mycoplasma pneumoniae</i>	(Cervical swab, Rectal swab, Throat swab,		
<input type="checkbox"/> Norovirus (Stool)	Urethral swab, Urine, Vaginal swab)		

SAMPLE INFORMATION (Check appropriate sample type and complete requested information. Only one sample per form.)				
Date Collected / /	Time Collected (24 hr. clock) :	Clinical Diagnosis	Date of Onset / /	
Sample Type:	<input type="checkbox"/> BAL	<input type="checkbox"/> Buccal swab (Oral swab)	<input type="checkbox"/> Cervical swab	<input type="checkbox"/> Combined NP/throat swabs
<input type="checkbox"/> CSF	<input type="checkbox"/> Lesion swab	<input type="checkbox"/> Nasal swab	<input type="checkbox"/> Nasal wash/aspirate	<input type="checkbox"/> Nasopharyngeal (NP) swab
<input type="checkbox"/> NP wash/aspirate	<input type="checkbox"/> Ocular swab	<input type="checkbox"/> Rectal swab	<input type="checkbox"/> Sputum	<input type="checkbox"/> Stool
<input type="checkbox"/> Tear strip	<input type="checkbox"/> Throat swab	<input type="checkbox"/> Tracheal aspirate	<input type="checkbox"/> Urethral swab	<input type="checkbox"/> Urine
<input type="checkbox"/> Vaginal swab	<input type="checkbox"/> Other: _____			
TEST(S) REQUESTED				
<input type="checkbox"/> Influenza by PCR (A, B, and subtyping for A and B)		Hospitalized (inpatient): <input type="checkbox"/> Yes <input type="checkbox"/> No		
Rapid Test Result: <input type="checkbox"/> Positive <input type="checkbox"/> Negative <input type="checkbox"/> Not Performed				
<input type="checkbox"/> Other: _____				

Electronically filled out then printed forms make data entry a breeze because it is legible.

Make sure your facility address is correct because that is where results will go.

Specimen Transport: CDS Courier

- The CDS courier can be used to transport specimens to SHL www.cdsofiowa.com/index.html
 - ▣ Coordinate shipments through your local birthing hospital.
 - ▣ For assistance: Ron Hardy (CDS) at 515-289- 9990 or Becky Teske (SHL) at 319-335-4500.
- Other options are commercial carriers and USPS
- Store specimens refrigerated prior to shipment
 - ▣ Transport on ice packs if not using courier (courier has cold section)
 - ▣ Ship within 72hrs from time of collection (ex. a specimen collected on Saturday can be refrigerated and sent on Monday)

Result Interpretation and Reporting

- Specimens tested for Influenza A and B
 - ▣ If positive for Flu A, subtyped with 2009 H1N1 and H3
 - ▣ If positive for Flu B, subtyped for Victoria or Yamagata
- Web-based result reporting system
 - ▣ Call 319-335-4358, email ask-shl@uiowa.edu
 - ▣ Optional- sign up for email notification of when samples are received and when results are available
 - ▣ Must contact SHL when personnel with web access leave your lab to remain HIPPA compliant
- Facilities without web access will receive results via USPS

Web Access for RESULTS

www.shl.uiowa.edu

State Hygienic Laboratory
at The University of Iowa

Holiday Hours Home Contact Google™ Custom Search Search Calendar IT Jobs@SHL

About the SHL Education/Training Lab Certification Publications News

Limnologists Katie Spoelstra and Eric Cherko

Test Results

NEW Clinical Test Request Forms

A-Z Test Menu

Environmental

- Ambient Air
- Analytical Services
- Grants to Counties
- Private Well Water
- Surface Water

Newborn & Maternal Screening

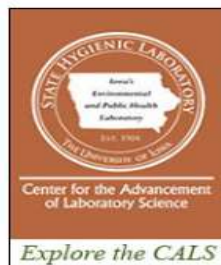
- Abnormalities
- Disorders
- Maternal Screening
- Newborn Screening

Disease Control

- General Microbiology
- Influenza
- Molecular Diagnostics
- Sentinel Lab Training
- Serology

CALS

- Explore
- Learn
- Engage
- Partners



News

Middle East Respiratory Syndrome Coronavirus(MERS)
On May 20, the Republic of Korea reported its first laboratory confirmed case of Middle Eastern Respiratory Syndrome (MERS). As of June 12, 125 cases with 11 deaths had been confirmed by the World Health Organization, all linked to health care facilities with confirmed MERS cases.

Lab confirms Shigellosis in 84 cases out of 150
The State Hygienic Laboratory is working with the Iowa Department of Public Health and Linn County Public Health to determine the source of a large Shigellosis cluster in Linn County. Shigellosis is a gastrointestinal disease that is caused by *Shigella* bacteria and can be spread either person to person or through contaminated food or water.

Announcements

- **2015 Laboratory Symposium**
Tuesday, Sept. 29, 2015
- **Project AWARE, A Watershed Awareness River Expedition**
July 11-16, 2015 Wapsipinicon River
- **Education Program for Well Drillers and County Sanitarians - Rules and Techniques to Hands-On Grouting & Installation**
Friday, August 14, 2015; 9:30 a.m. – 3:00 p.m.
- **Test Request Form Generator for Clinical Samples**
July 14, 2015

Click on OpenELIS Web Portal

Access
Results



Questions about web access may be directed to ask-shl@uiowa.edu or to 319.335.4358.

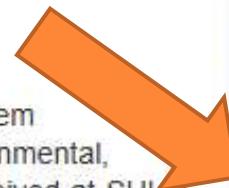
OpenELIS

The Open Enterprise Laboratory Information System (OpenELIS) web portal contains results for environmental, safe drinking water, and private well samples received at SHL beginning on Jan. 1, 2012, and clinical samples (except for rabies, maternal screening and newborn screening) received at SHL beginning on March 1, 2015.

Neonatal Screening

The Neonatal Metabolic Screening Program web portal

User
Guide



Forms

- ▶ [Results Web Access](#)
- ▶ [Paperless Results Reporting](#)
- ▶ [Faxed Results Reporting](#)

Web Portal User Guides

- ▶ [OpenELIS](#)
- ▶ [PHIMS](#)
- ▶ [Neonatal Screening](#)
- ▶ [Change Password](#)

Survey of Respiratory Virus Surveillance Test Results from Iowa Clinical Laboratories




☐ How it works

- ☐ Each week SHL will email you a link to a quick online survey where you report the number of rapid flu, rapid RSV and any non-flu virus detection
- ☐ Within that email we also provide the compilation from the previous week's results from around the state.

☐ Benefit

- ☐ Help you be aware of what's circulating in your local area
 - ☐ Data is used by IDPH for the weekly flu report.
 - ☐ Positive predictive value of rapid influenza tests relies on prevalence in your local community
- ☐ To participate contact Jeff Benfer

Link to Survey



Influenza/Rapid RSV/Non-Flu Panel
Week 35, Aug 28-Sept 3, 2016


* Required

Your Name *

Your Email Address *

Facility Name *

14% completed

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Previous Weeks Results

REGION	FACILITY NAME	RAPID ANTIGEN INFLUENZA TESTS					Tested
		Tested	Flu A	Flu B	%Positive	Tests Performed	
Region 1		131	11	2	10%		67
	Boone County Hospital, Boone						
	Broadlawns Medical Center, Des Moines	20	1	0	5%	Biofire Film Array	0
	Clinical Pathology Laboratory						
	Dallas County Health System, Perry	9	0	0	0%	Vue Influenza A+B	5
	Des Moines VA Medical Center, Des Moines						
	Hansen Family Hospital, Iowa Falls	14	0	0	0%	ecular Influenza A	4
	Greene County Medical Center, Jefferson	14	2	0	14%	xNOW Influenza A	9
	Grinnell Regional Medical Center, Grinnell	11	2	0	18%	m for Rapid Detect	3
	Grundy County Memorial Hospital, Grundy Center						
	Hamilton County Public Hospital, Webster City	3	1	0	33%	m for Rapid Detect	0
	Hubbard Medical Clinic, Hubbard	3	1	1	67%	ecular Influenza A	0
	Iowa Lutheran Hospital, Des Moines						
	Iowa Methodist Medical Center, Des Moines	18	2	0	11%	ecular Influenza A	19
	Iowa Veterans Home, Marshalltown	0	0	0		0	0
	Marshalltown Medical/Surgical Center, Marshalltown						
	Mary Greeley Medical Center Lab, Ames						
	McFarland Clinic PC, Ames						
	Mercy Clinical Laboratory						
	Mercy Hospital Medical Center, Des Moines						
	Pathology Laboratory						
	Skiff Medical Center, Newton	5	1	1	40%	m for Rapid Detect	5
	St. Anthony Regional Hospital, Carroll						
	Stewart Memorial Community Hospital, Lake City						
	Story County Medical Center, Nevada						
	Theilen Student Health Center (ISU), Ames	4	1	0	25%	Vue Influenza A+B	0

Regional Results from Previous Week

Table 2: Percent of Influenza rapid tests positive and number of tests performed by region for the present week

REGION*	APID ANTIGEN INFLUENZA TEST				RAPID ANITGEN RSV TESTS			NON - FLU PANEL TESTS									
	Tested	Flu A	Flu B	%Positive	Tested	Positive	% Positive	Tested	Adenovirus	HMPV	Para 1	Para 2	Para 3	Para 4	RSV	Coronavirus	Rhinovirus
Region 1	131	11	2	10%	67	31	46%	139	3	9	2	0	0	1	43	26	15
Region 2	23	0	1	4%	12	4	33%	0	0	0	0	0	0	0	0	0	0
Region 3	40	1	0	3%	22	6	27%	0	0	0	0	0	0	0	0	0	0
Region 4	66	6	0	9%	17	9	53%	4	0	0	0	0	0	0	0	0	0
Region 5	107	7	1	7%	49	19	39%	0	0	0	0	0	0	0	0	0	0
Region 6	617	57	19	12%	211	80	38%	121	9	11	0	1	1	1	22	4	3
Total	984	82	23	11%	378	149	39%	264	12	20	2	1	1	2	65	30	18

Laboratory Contact Information



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F:319-335-4555

THANK YOU FOR PARTICIPATING!!!

Antiviral Treatment and Prophylaxis



Antiviral Agents for Flu



- Adamantanes
 - ▣ Amantadine
 - ▣ Rimantadine
- Baloxavir marboxil
- Neuraminidase inhibitors
 - ▣ Oseltamivir (Tamiflu[®]) oral
 - ▣ Zanamivir (Relenza[®]) inhaled
 - ▣ Peramivir (Rapivab[®]) intravenous

Adamantanes



- ❑ Target the M2 ion channel protein of influenza A viruses
- ❑ Active against influenza A viruses, but not influenza B viruses
- ❑ High levels of resistance (>99%) to adamantanes among circulating influenza A(H3N2) and influenza A(H1N1)pdm09 (“2009 H1N1”) viruses
- ❑ Not recommended for antiviral treatment or chemoprophylaxis of currently circulating influenza A viruses

Baloxavir (Xofluza®)



- Newly approved by the FDA for treatment of acute uncomplicated influenza within 2 days of illness onset in people 12 years and older
- A cap-dependent endonuclease inhibitor that interferes with viral RNA transcription and blocks virus replication
- Active against both influenza A and B viruses
- No available data in hospitalized patients or as chemoprophylaxis of influenza; not recommended in pregnant or breastfeeding women

Neuraminidase inhibitors



- **Neuraminidase inhibitors** (primary agents for A and B influenza)
 - ▣ Oseltamivir (Tamiflu[®]) oral
 - ▣ Zanamivir (Relenza[®]) inhaled
 - ▣ Peramivir (Rapivab[®]) intravenous

Oseltamivir Evidence



- Early treatment of hospitalized adult influenza patients with oseltamivir has been reported to reduce death in some observational studies
- In hospitalized children, early antiviral treatment with oseltamivir has been reported to shorten the duration of hospitalization in observational studies

Treatment Recommendations



- Early antiviral treatment can shorten duration of fever and illness symptoms, and may reduce the risk of some complications from influenza
- Clinical benefit is greatest when antiviral treatment is administered early, especially within 48 hours of influenza illness onset in clinical trials and observational studies

Treatment Recommendations



- Antiviral treatment is recommended as early as possible for any patient with confirmed or suspected influenza who:
 - ▣ is hospitalized;
 - ▣ has severe, complicated, or progressive illness; or is at higher risk for influenza complications
- Oral oseltamivir is the recommended antiviral for patients with severe, complicated, or progressive illness who are not hospitalized, and for hospitalized influenza patients

Patients at Higher Risk



- Patients under 2 or over 65 years of age
- Those with chronic diseases, pregnant (2 weeks post-partum), children on aspirin therapy, immunosuppressed patients, extremely obese (BMI ≥ 40), residents of long term care, American Indian/Alaska Native
- Should be started as soon as possible after illness onset (not waiting for lab results), ideally within 48 hours but there might still benefit for severe, complicated, or hospitalized patients when started after 48 hours

Treatment Recommendations



- Antiviral treatment also can be considered for any previously healthy, symptomatic outpatient not at high risk for influenza complications, who is diagnosed with confirmed or suspected influenza, on the basis of clinical judgment, if treatment can be initiated within 48 hours of illness onset
- For outpatients with acute uncomplicated influenza, oral oseltamivir, inhaled zanamivir, intravenous peramivir, or oral baloxavir may be used for treatment

Antiviral Treatment Dosages

- **Zanamivir** (*Relenza* – inhaled powder)
 - ▣ 10 mg (two 5 mg inhalations) twice daily for 5 days
 - ▣ Treatment – not approved in <7 years of age
- **Oseltamivir** (*Tamiflu* – tablet)
 - ▣ Children 1 year and older (under 40 Kg) dose varies by weight for 5 days
 - ▣ Adults (older children 40+ kg) 75 mg twice daily for 5 days
- **Peramivir** (*Rapivab* – intravenous)
 - ▣ Age 2-12: 12 mg/kg dose (up to 600 mg) via IV infusion for at least 15 min
 - ▣ Age 13 and older: 600 mg via IV infusion for at least 15 min
 - ▣ 1 day of treatment for uncomplicated influenza, may be longer in severely ill
- **Baloxavir** (*Xofluza* – oral)
 - ▣ Ages 12 and older: 40 to <80 kg: One 40 mg dose
 - ▣ >80 kg: One 80 mg dose

Antiviral Prophylaxis

(not substitute for vaccine, or Tx if become ill)

□ **Post-exposure**

- ▣ 7 days duration after last close exposure to persons with confirmed or suspected cases of flu
- ▣ Give within 48 hours of last exposure
- ▣ Counsel patients to seek evaluation if illness develops

□ **Pre-exposure**

- ▣ Can be considered for prevention in high risk persons who cannot be vaccinated or were recently (within 2 weeks) vaccinated
 - ▣ Especially in institutional settings with outbreaks, and should be given to all residents for duration of exposure - minimum of 2 weeks and continue up to 1 week after last known case
- Susceptibility to infection returns when antivirals stopped

Antiviral Prophylaxis Dosage

- **Zanamivir** (*Relenza* – inhaled powder) for 7 days
 - ▣ 10 mg (two 5 mg inhalations) once daily
 - ▣ Not approved for children <5 years of age
- **Oseltamivir** (*Tamiflu* – oral) for 7 days
 - ▣ Children 3 months and older (<40 kg) dose varies by weight
 - ▣ Older children and adult (40+ kg) 75 mg once daily
- **Peramivir** (*Rapivab* – intravenous) and **Baloxavir** are not currently approved for antiviral prophylaxis
- See ***Influenza Antiviral Drugs*** at www.cdc.gov/flu/professionals/antivirals/index.htm

Questions?



**“Don’t think of it as getting a flu shot.
Think of it as installing virus protection software.”**

Reprinted from The Funny Times / PO Box 18530 / Cleveland Heights, OH 44118
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